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GOLD [ADVANCE RELEASE]

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Gold

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In 2012, domestic mine production of gold increased to 235,000 kilograms (kg), slightly more than that in 2011 (tables 1–2). Although production increased for the third consecutive year, it was 36% less than the record-high production in 1998. In 2012, the value of domestic production increased to a record high of $12.6 billion, 7% more than that in 2011, mainly owing to a 6% increase in the average price of gold. It was the 11th consecutive year that the value of domestic gold production increased. Mines in Nevada and Alaska, the two leading producing States, accounted for about 75% and 12%, respectively, of domestic gold production in 2012. The remaining production came from mines in Utah, Colorado, California, Washington, South Dakota, Montana, Arizona, and New Mexico, in descending order of production. About 5% of domestic gold was produced as a byproduct of processing base metals, primarily copper, and platinum-group metals. The 31 leading operations yielded 99% of domestic gold produced (table 3).

In 2012, the global exploration budget for gold, the leading exploration target, increased by 17% from that in 2011 to $9.7 billion and accounted for about 47% of the budgeted nonferrous and nonfuel mineral exploration expenditures of $20.5 billion. Exploration in Australia, Canada, and the United States accounted for 36% of the budgeted global gold exploration expenditure (Lowrey, 2012; Wilburn, 2013, p. 23, 32, 39).

Commercial-grade refined gold was produced by about two dozen domestic companies. Of several thousand companies and artisans, a few dozen companies dominated the fabrication of gold into commercial products. Jewelry manufacturing in the United States was heavily concentrated in the New York, NY, and Providence, RI, areas, with other manufacturers in California, Florida, and Texas. In 2012, the estimated percentages of gold used for commercial products (noninvestment) were jewelry and arts, 75%; dental and medical, 14%; electrical and electronics, 6%; and other, 5%.

In 2012, the five leading global gold producers (in descending order) were Barrick Gold Corp. (Toronto, Ontario, Canada), Newmont Mining Corp. (Denver, CO), AngloGold Ashanti Ltd. (Johannesburg, South Africa), Gold Fields Ltd. (Johannesburg), and Kinross Gold Corp. (Toronto); these producers accounted for more than 25% of world gold production (Meader and others, 2013, p. 51).

Total world mine production of gold in 2012 was 22 metric tons (t) greater than production in 2011. China, where estimated mine production increased by 41 t, remained the leading gold producer. South Africa, where production decreased for the 12th consecutive year, dropped to the sixth leading gold producer. In 2005, South Africa had been the leading gold producing country. In 2012, the five leading producers among more than 100 gold-mining countries were, in descending order, China, Australia, the United States, Russia, and Peru (table 8).

Through 2012, historical mine production has totaled an estimated 174,000 t of gold. Because nearly 100% of gold has been recycled and is resistant to corrosion and oxidation, much of the gold that has been produced is still available. As of the end of 2012, 30,100 t was held by central banks as official stocks, 34,700 t was held privately as investment, 84,600 t was held privately as jewelry, 21,200 t was in other fabricated products, and the remaining 3,600 t was unaccounted (Meader and others, 2013, p. 59).

Legislation and Government Programs

Gold mining has been identified as a potential source of funding for armed groups engaged in civil unrest in Congo (Kinshasa) (DRC) and surrounding countries. The United States, through the enactment of Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) on July 21, 2010, made it a statutory obligation for all companies registered with the U.S. Securities and Exchange Commission (SEC) to perform due diligence to determine whether the products they manufacture, or the components of the products they manufacture, contain tantalum, tin, tungsten, or gold (3TG) minerals and if so, to determine whether these minerals were sourced from the DRC and (or) its bordering countries. Accordingly, companies must file a specialized disclosure form (SD Form) with the SEC including their findings as to whether 3TG minerals used in their products and components are sourced from the DRC. Companies that determine that their products or components include 3TGs from the DRC are required to trace those minerals back through the supply chain to the mine of origin (U.S. Government Printing Office, 2010, p. 2213–2220). The first deadline for companies required to file an SD Form with the SEC was May 31, 2014.

While the United States was the only country to enact conflict legislation, other groups and international organizations issued guidance such as the World Gold Council's Conflict-Free Standard published on October 18, 2012. Additionally, the Electronic Industries Citizenship Coalition (EICC-GeSI), the London Bullion Market Association (LBMA), the Organisation for Economic Co-operation and Development (OECD), the Public Private Alliance on Responsible Mineral Trade, the Responsible Jewellery Council, and the United Nations, have similar programs in the development stage to assist companies to avoid contributing to regional conflicts (Heymann, 2013).

Production

Domestic hard-rock mine production data for gold were compiled by the U.S. Geological Survey from two separate

voluntary surveys of U.S. mining operations—one for monthly and the other for annual production of copper, gold, lead, silver, and zinc from lode mines. Alaska's placer gold production data, provided by the Alaska Division of Geology & Geophysical Surveys, were included in the domestic production figures. Individual company production and performance data listed in table 3 and cited elsewhere in this report were obtained from published sources, such as company annual reports.

Alaska.—In 2012, Alaska produced 27,700 kg of gold, from both lode and placer production, valued at $1.49 billion, which was 7% more by weight and 14% more by value than that produced in 2011. Gold was produced at one open pit gold mine, two underground gold mines, one underground zinc-silver mine, one underground development project, and various placer operations. Kinross's open pit Fort Knox Mine near Fairbanks was the State's leading gold producer with 11,200 kg of gold in 2012, 24% more than that in 2011. The increase resulted from a shift to higher grade mined ore from processing lower grade stockpiled ore (Kinross Gold Corp., 2013, p. MDA20).

The underground Pogo Mine, 145 kilometers (km) southeast of Fairbanks, a joint venture between Sumitomo Metal Mining Co., Ltd. (Tokyo, Japan) (85%) and Sumitomo Co. (Tokyo) (15%), produced about 9,820 kg of gold during 2012, a 3% decrease compared with output in 2011 (Athey and others, 2013, p. 45). Coeur d'Alene Mines Corp.'s (Coeur d'Alene, ID) underground Kensington Mine produced 2,550 kg of gold. Production declined only 7% from that in 2011 despite a 50% reduction in throughput from December 2011 to May 2012 to allow for construction of several infrastructure projects (Coeur d'Alene Mines Corp., 2013, p. 25–26).

Other hard-rock gold production was as a byproduct from the Hecla Mining Co.'s (Coeur d'Alene) underground zinc-silver Greens Creek Mine on Admiralty Island near Juneau and the Fire River Gold Corp.'s (Vancouver) Nixon Fork Mine, 56 km northeast of McGrath, which produced 274 kg of gold during its 2011–12 startup phase. Full production was expected by mid-2013 (Fire River Gold Corp., 2013, p. 4).

According to the Alaska Division of Geology and Geophysics Surveys, 3,110 kg of gold was produced at 312 placer operations in 2012, including recreational operations, about 27% more than that produced in 2011. Six of the operations produced more than 78 kilograms per year (kg/yr) of gold and were considered large, and 283 small operations produced less than 20 kg/yr (Athey and others, 2013, p. 40).

Expenditures in Alaska for nonfuel mineral exploration decreased to $335 million in 2012, down from $365 million in 2011. The decline was attributed to lower commodity prices, global economic uncertainties, and increased competition for venture capital for mineral exploration. In 2012, there were 31 projects that spent more than $1 million, and an additional 33 projects spent between $100,000 and $1 million on exploration. Porphyry copper-gold deposits accounted for 36.7% of the exploration expenditures, granite/intrusion-related gold deposits accounted for 33.5%, and other various gold-quartz vein deposits accounted for 7.6%. Three advanced exploration projects, Donlin Creek [50-50 joint venture between Barrick and Novogold Resources Inc. (Vancouver)], Livengood [International Tower Hill Mines Ltd. (Vancouver)], and Pebble [50-50 joint venture between Anglo American plc (London, United Kingdom) and Northern Dynasty Minerals Ltd. (Vancouver)], accounted for about 59% of Alaska's total mineral exploration expenditures (Athey and others, 2013, p. 9–12).

Arizona.—In 2011, most mined gold recovered in Arizona was as a byproduct of copper mining and processing. In 2012, however, American Bonanza Gold Corp. (Vancouver) began the commissioning phase of the Copperstone gold project and produced about 200 kg of gold. The mine did not reach a commercial production level owing to equipment availability and difficulties in accessing higher grade ore (American Bonanza Gold Corp., 2013, p. 4–5).

California.—In 2012, gold was produced at Atna Resources Ltd.'s (Golden, CO) Briggs Mine and New Gold Inc.'s (Vancouver) Mesquite Mine. The Mesquite Mine, 70 km northwest of Yuma, AZ, produced 4,420 kg of gold, which was 10% less than that produced in 2011 owing to processing lower grade ore, because of an increase in mine development (New Gold Inc., 2013, p. 13). The Briggs Mine produced 1,110 kg of gold, which was 18% less than 2011 production because of a reduction in ore mined and processed during a development phase (Atna Resources Ltd., 2013, p. 4–7). Gold was also produced as a byproduct from sand and gravel operations and from several small underground mines that primarily recovered specimen gold products (Clinkenbeard and Smith, 2013).

Colorado.—In 2012, Colorado remained the fourth-ranked gold-producing State in the United States. Cripple Creek & Victor Gold Mining Co. (a wholly owned subsidiary of AngloGold), reported that its open pit Cresson Mine, the country's seventh-ranked gold mine, produced 7,680 kg of gold in 2012. Production decreased 7% from that in 2011 owing to the phasing in of a new leaching facility, lengthening the amount of time from ore placement on the leach pad to recovery of gold (AngloGold Ashanti Ltd., 2013).

Montana.—Barrick's Golden Sunlight Mine, 55 km east of Butte, which resumed production in early 2011 after an extended development period, continued to increase production. In 2012, the mine produced 3,050 kg of gold (Barrick Gold Corp., 2013, p. 39).

Nevada.—Gold production increased by 3% to 175,000 kg in 2012, and Nevada retained its long-standing position as the Nation's leading gold-producing State. At least 126 projects were drilled in 2012, down from 130 projects in 2011. Of the 126 projects, 106 targeted gold and eight targeted copper. The copper targets, however, often have gold as a byproduct (Davis and Muntean, 2014).

In 2012, Barrick produced 97,100 kg of gold from its wholly owned Bald Mountain, Cortez, Goldstrike, Ruby Hill, and Storm Mines; its 75% share of the Turquoise Ridge Mine (a joint venture with Newmont, 25%); its 50% share of Smoky Valley Common Operation (50% owned and operated by Kinross); and its 33.33% share of the Marigold Mine [67.67% owned and operated by Goldcorp Inc. (Toronto)]. This was slightly more than the company's gold production from Nevada in 2011. In 2012, gold production from Goldstrike was 2,670 kg or 8% more than 2011 production owing to operation of an additional mill at the autoclave facility increasing throughput. Production from the Bald Mountain Mine was 2,120 kg or a

73% increase following completion of a high waste-stripping sequence in 2011 and higher recovery rates from the leach pads. In 2012, Barrick recovered about 1,590 kg and 2,680 kg less gold, respectively, from the Cortez and Ruby Hill Mines than in 2011 owing to the processing of lower-grade ores (Barrick Gold Corp., 2013, p. 39–40).

Newmont's operations in Nevada produced 54,400 kg from nine open pits and seven underground mines. The operations were the Eastern Nevada Mine Group (Carlin East, Gold Quarry, Leeville, North Lantern, and Pete Mines) and the Emigrant, Lone Tree, Midas, Mule Canyon, Phoenix, Trenton Canyon, Twin Creeks, and the joint venture Turquoise Ridge (25% share) Mines. In 2012, gold production from Newmont's Nevada operations increased slightly because of higher throughput at Mill 6, Juniper Mill, and the Twin Creeks Autoclave, as well as from the startup of the Emigrant Mine, which more than offset lower production at the Phoenix and Midas Mines owing to lower ore grades (Newmont Mining Corp., 2013, p. 28, 71).

Some of the other mines in Nevada increased gold production in 2012 because of increases in the amount of ore processed. The Veris Gold Corp.'s (Vancouver) [formerly Yukon-Nevada Gold Corp.] Jerritt Canyon Complex produced 3,290 kg of gold, a 56% increase compared with 2011 production (Veris Gold Corp., 2013, p. 2–3). Allied Nevada Gold Corp.'s (Reno) Hycroft Mine produced 4,260 kg of gold, 55% more than in 2011 (Allied Nevada Gold Corp., 2013, p. 31).

Utah.—Rio Tinto plc's (London, United Kingdom) Bingham Canyon Mine near Salt Lake City, which was operated by Kennecott Utah Copper Corp. (Magna), produced 6,220 kg of gold as a byproduct from copper mining. The gold production decreased by 47% compared with that in 2011 because of lower ore grades and lower mill throughput caused by increased hardness of the ore milled (Rio Tinto plc, 2013, p. 49).

Washington.—In 2012, Kinross's underground Kettle River-Buckhorn Mine in the north-central part of the State produced 4,860 kg of gold, 11% less than in 2011 owing to a planned waste-stripping phase that resulted in a decline in the amount of ore mined and processed (Kinross Gold Corp., 2013, p. MDA22).

Consumption

Thomson Reuters Gold Fields Mineral Services Ltd. (GFMS) reported that total global fabrication in 2012, including the use of scrap, was 2,610 t, about 5% lower than that of 2011. Owing to the high and volatile price of gold, jewelry used only 1,890 t of gold, 4% less than in 2011. The six leading jewelry manufacturing countries, by gold contained in jewelry—India (618 t), China (498 t), Italy (86.2 t), Turkey (73.8 t), the United States (53.7 t), and Russia (49.2 t)—accounted for 73% of the world's gold jewelry fabrication. In 2012, only 3 countries had significant (more than 1 t) increases in gold jewelry fabrication—Egypt (8.8 t), Russia (4.1 t), and China (2.8 t)—and 12 countries had significant decreases (more than 1 t) in gold jewelry fabrication, of which India (48.8 t), Italy (7.6 t), and the United States (6.6 t) accounted for the largest decreases. Worldwide new gold jewelry sales in 2012 were 3% less, by contained gold weight, than those of 2011. The main reason for the decrease was a 66.3 t decline in new gold jewelry sales, by contained gold weight, in India, which was attributed to a dramatic increase in the local price of gold, a decrease in rural income owing to a severe drought, and competition from alternative quasi-investment options. In some regions of the world, especially in India, gold jewelry is purchased as an investment or as a store of wealth (Meader and others, 2013, p. 83–109).

In 2012, consumption of gold for industrial uses declined because of high gold prices, global economic weakness, and substitutions for gold. Global gold consumption for electronics (285 t) and dentistry (38.6 t) decreased by 11% and 10%, respectively. Gold used in other industrial and decorative applications (84.4 t) decreased by 5%, primarily because of a sharp decline in India (Meader and others, 2013, p. 83–109).

Price and Investment

The Engelhard daily price of gold was volatile and approached the $1,800-per-troy-ounce level several times during 2012. The annual average daily price for 2012 of $1,672.75 per troy ounce was 6% more than the annual average price in 2011 and was a record-high annual average price. Although the smallest percentage increase in 11 years, 2012 was the 11th consecutive year of annual average price increases.

Global investment in gold in 2012 fell slightly compared with that in 2011, but remained very high because of financial and economic uncertainties that encouraged investment in gold. Net global investment in gold in 2012 was 1,610 t, worth $86 billion. The bulk of the investment was the purchase of gold bars that total 998 t. Gold held in gold exchange-traded funds (ETFs) and physically backed Canadian funds increased by 279 t to 2,690 t. However, global official coin minting was down by 19% to 200 t, owing to a large decrease in Turkey and weak demand for gold coins in Europe and North America. The U.S. Mint reported that 23,400 kg of American Eagle gold bullion coins and 2,460 kg of American Buffalo gold bullion coins were sold in 2012, a decrease of 25% and 55%, respectively, from quantities sold in 2011 (Meader and others, 2012, p. 21–38).

According to GFMS estimates, in 2012 the official sector (Governments and national banks) purchased a net 532 t of gold, which was a 48-year high. Some of the leading buyers in 2012 were Russia (75 t), the Philippines (34 t), Kazakhstan (33 t), the Republic of Korea (30 t), and Mexico (19 t) (Meader and others, 2013, p. 60–62).

Foreign Trade

On the basis of unrounded data, refined bullion made up 33% of U.S. gold imports and 54% of exports; the United States was a net exporter of 262,000 kg of refined bullion in 2012 (tables 4, 6). In 2012, the imports and exports of gold bullion decreased by 24% and 8%, respectively, from those in 2011. Canada and Mexico provided almost 43% and 34%, respectively, of the refined bullion imported in 2012. The United Kingdom (37%), Hong Kong (35%), Switzerland (12%), and India (8%) were the principal destinations for refined bullion exports.

World Industry Structure

According to its annual review of world gold supply and demand, GFMS calculated that the total global supply of gold in 2012 was 4,480 t compared with the revised 2011 total supply of 4,520 t. It included an estimated 23-t increase in global mine production, no net official sector sales, no net producer hedging, and no implied net disinvestment for sales of bars and coins by private investors. Old scrap production decreased by 53 t because scrap stocks had been depleted and consumers deferred selling scrap during the year in anticipation of even higher gold prices (Meader and others, 2013, p. 8–10).

World Review

World mine output of gold in 2012 from about 100 countries with reported quantities of production was 2,690 t, about 20 t more than that in 2011, and it was the fourth consecutive year that world production increased (table 8). Gold production increased by more than 1 t in 19 countries, with the largest increases taking place in China (41,000 kg); Russia (18,200 kg); Mexico (12,500 kg); and Colombia (10,300 kg). Sudan's gold exports increased by 22,800 kg and, although much of this was from domestic production, some was from imported artisanal production from neighboring countries. These increases were partially offset by decreases in gold production in several countries, the largest of which took place in Indonesia (37,300 kg); South Africa (20,200 kg); the Philippines (15,400 kg); Australia (10,000 kg); Papua New Guinea (8,660 kg); and Kyrgyzstan (8,320 kg).

The 12 leading gold-producing countries—China, Australia, the United States, Russia, Peru, South Africa, Canada, Mexico, Uzbekistan, Ghana, Colombia, and Brazil (in descending order)—accounted for 72% of global production. The next 12 leading gold-producing countries accounted for almost 18% of production.

Australia.—Australia's gold production in 2012 decreased by 4% compared with that in 2011. Production decreases from Newcrest Mining Ltd.'s (Melbourne, Victoria) Cadia Valley and Barrick's Kalgoorlie Mines, owing to lower ore grades, and Xstrata plc's (Zug, Switzerland) Ernest Henry Mine, owing to the completion of mining a low-cost and high-grade area, accounted for most of the decrease (Barrick Gold Corp., 2013, p. 41; Newcrest Mining Ltd., 2013; Xstrata plc, 2013, p. 2). Partially offsetting these decreases were increases in production from a new operation, Regis Resources Ltd.'s (Subiaco, Western Australia) Garden Well Mine and from LionGold Corp. Ltd.'s (Mount Clear, Victoria) Ballarat Mine that was ramping up to full production (Regis Resources Ltd., 2013; LionGold Corp. Ltd., 2014). Barrick's Yilgarn South Mine produced more gold in 2012 owing to increased ore throughput and higher grade, while, Silver Lake Resources Ltd.'s (South Perth, Western Australia) Mount Monger Mine, and Ramelius Resources Ltd.'s (East Perth, Western Australia) Mount Magnet Mine both produced about 1 t more than in 2011 because of higher ore grades (Barrick Gold Corp., 2013, p. 41; Ramelius Resources Ltd., 2013, p. 3; Silver Lake Resources Ltd., 2013, p. 8).

Canada.—Canada ranked seventh in world gold production and its output increased slightly to 104,000 kg. Production increased owing to the startup of AuRico Gold Inc.'s (Toronto) Young-Davidson Mine and New Gold Inc.'s (Vancouver) New Afton Mine and from increases in production from Osisko Mining Corp.'s (Montreal) Canadian Malartic Mine, which was commissioned in 2011, and from Agnico Eagle Mines Ltd.'s (Toronto) LaRonde and Meadowbank Mines (Agnico Eagle Mines Ltd., 2013, p. 17; AuRico Gold Inc., 2013, p. 5; New Gold Inc., 2013, p. 2; Osisko Mining Corp., 2013, p. 2–3). These increases were partially offset by production decreases at Goldcorp's Red Lake and Agnico's Goldex Mines (Agnico Eagle Mines Ltd., 2013, p. 17; Goldcorp Inc., 2013, p. 41).

China.—China's gold production increased by 11% to 403,000 kg in 2012 and China remained the leading gold-producing country for the sixth consecutive year. Much of the increase was from primary gold mines, which accounted for 85% of China's gold production and where production increased by 13%. Output of gold as a byproduct of nonferrous mining was 61,300 kg or 13% more than 2011 production (Antaike Precious Metals Monthly, 2013c). In 2012, the top 10 gold enterprises produced about 49% of China's gold. The leading five provinces in terms of gold production, in descending order, were Shandong, Henan, Jiangxi, Yunnan, and Inner Mongolia Autonomous Region, which accounted for more than 60% of the country's total gold production (Antaike Precious Metals Monthly, 2013a).

China remained one of the leading consumers of gold and in 2012, consumption was reported to be 832,000 kg, an increase of 71,000 kg or 9% from consumption in 2011. Gold bar consumption reached 240,000 kg, which was 12% more than that in 2011. Consumption for gold ornamentation, including jewelry, was 503,000 kg and for gold coins was 25,300 kg, 10% and 22% more, respectively, than 2011 consumption. Gold used for industrial uses, including electronics, was 53,200 kg, and gold consumed for other uses was 16,500 kg, which were, 8% and 7% less, respectively, than 2011 consumption (Antaike Precious Metals Monthly, 2013b).

Ghana.—Production of gold in 2012 was 86,540 kg, which was 4% more than that of 2011. The increase was primarily from two mines, Endeavour Mining Corp.'s (Vancouver) Nzema Mine and Perseus Mining Ltd.'s (Subiaco) Edikan Gold Mine, that started up in 2011 and had its first full year of production in 2012 (Endeavour Mining Corp., 2013, p. 2; Perseus Mining Ltd., 2013, p. 3–5).

Indonesia.—In 2012, gold production declined to 58,800 kg, a 39% decrease compared with 2011 output and 58% less than the historically high production in 2009. Some of the leading gold producers were copper mines that produced byproduct gold. Freeport-McMoRan Copper & Gold Inc.'s Grasberg Mine and Newmont's Batu Hijau Mine accounted for 46% (26,800 kg) and 4% (2,115 kg), respectively, of Indonesia's gold production in 2012. Production at Grasberg was 32% lower than in 2011 because of a decrease in ore grade owing to geotechnical issues. Also, milling operations were temporarily suspended in the first quarter owing to damage to concentrate and fuel pipelines from civil unrest during a strike. Batu Hijau's production was 78% less than in 2011 owing to the processing of lower grade stockpiled ore because the mine entered into a higher waste-stripping phase (Freeport-McMoRan

Copper & Gold Inc., 2013, p. 39–40; Newmont Mining Corp., 2013, p. 73).

Kyrgyzstan.—In 2012, gold production decreased by 45% to 10,300 kg. Production from Kumtor, the leading producer in Kyrgyzstan, was 42% less than in 2011 owing to a 10-day strike and geotechnical issues caused by glacial movement that limited access to the ore (Centerra Gold Inc., 2013, p. 15, 72).

Mexico.—In 2012, Mexico's gold production reached an all-time high of 96,700 kg, a 15% increase from 2011 production. Production increases from mines that recently opened and were continuing to ramp up production were the principal factors in increased production. Operations that were still ramping up to full production were Agnico-Eagle's Pinos Altos Mine, Goldcorp's Peñasquito Mine, and Yamana Gold Inc.'s (Toronto) Mercedes Mine. The new producers were the Noche Buena Mine [56% Fresnillo plc (Mexico City) and 44% Newmont] and Argonaut Gold Inc.'s (Reno, NV) La Colorada Mine, both located in Sonora. A few operations had production declines, including Goldcorp's El Sauzal Mine, Coeur's Palmarejo Mine, and joint venture Soledad-Dipolos Mine (56% Fresnillo and 44% Newmont), caused by lower ore grades and throughput and lower recovery rates (Agnico-Eagle Mines Ltd., 2013, p. 26; Argonaut Gold Inc., 2013, p. 7; Coeur d'Alene Mines Corp., 2013, p. 19–20; Goldcorp Inc., 2013, p. 49–53; Newmont Mining Corp., 2013, p. 29, 71; Yamana Gold Inc., 2013, p. 20).

Papua New Guinea.—In 2012, gold production from Papua New Guinea's mines decreased by 8,660 kg, a 14% decrease compared with that of 2011. Much of the decrease was from the two leading gold-producing mines, Newcrest's Lihir Island Mine and Barrick's Porgera Mine. The Lihir Island Mine produced 10% less gold than in 2011 because of a combination of lower grade and ore throughput. At the Porgera Mine, output was 13% less than in 2011 owing to pit wall remediation restricting access to higher grade areas, power supply interruptions, labor issues, and a reduction in underground mining. Newcrest's 50%-owned Hidden Valley Mine produced 23% less than in 2011 (Barrick Gold Corp., 2013, p. 6; Newcrest Mining Ltd., 2013). Production at Ok Tedi Mining Ltd.'s (Tabubil) Ok Tedi Mine was 3% less than in 2011 because the mine began closure procedures ahead of its scheduled closure in 2013; however, a feasibility study to extend the mine life was underway (Highland Pacific Ltd., 2013, p. 9).

Peru.—In 2012, gold production was 161,000 kg, 3% less than in 2011. Lower production from Barrick's Pierina Mine and Cia de Minas Buenaventura S.A.A.'s (Lima) La Zanja Mine owing to a lower ore throughput and from Buenaventura's Orcopampa Mine owing to lower grades were the main factors in the decline (Barrick Gold Corp., 2013, p. 40; Cia de Minas Buenaventura S.A.A., 2013, p. 7, 33).

Some mines produced more gold in 2012, such as Rio Alto Mining Ltd.'s (Vancouver) La Arena Mine, which started production in May 2011 and reached full production in January 2012, and produced 6,260 kg of gold (Rio Alto Mining Ltd., 2013, p. 3). The leading gold mine in Peru, Newmont and Buenaventura's jointly owned Yanacocha Mine, produced slightly more gold in 2012 resulting from higher grades and improved recovery (Newmont Mining Corp., 2013, p. 72).

Russia.—In 2012, Russia's gold production was 217,800 kg, 9% more than 2011 production. The leading gold producer, Polyus Gold, produced 52,200 kg, a 12% increase compared with 2011 production because of an increase in recovery rates and processing volumes (Polyus Gold Mining Co., 2013, p. 4–5). Production from Polymetal International plc's (St. Petersburg) operations was 18,300 kg, 33% more than that in 2011. The production increases were from the Albazino and Omolon operations, which both added new mines in 2012 (Polymetal International plc, 2013, p. 29–47). These production increases more than offset the production decline at Kinross's Kupol Mine, which was the result of an increased stripping ratio (Kinross Gold Corp., 2013, p. MDA23).

South Africa.—Mine gold output in South Africa decreased for the 10th consecutive year to the lowest level since 1906. In 2012, South Africa's production of 160,000 kg was an 11% decrease from that in 2011 owing to widespread strikes in the second half of the year, temporary closure of shafts owing to mine accidents, and high costs that curtailed operations (Mining Journal, 2013).

Uzbekistan.—In 2012, gold production increased slightly because of expansion of the mining haul truck fleet and the commissioning of an in-pit conveyor at Navoi Mining and Metallurgical Combinat's Muruntau open pit in 2011. Navoi completed a new bio-oxidation facility to process refractory ores, which was expected to increase gold production in 2013 (Meader and others, 2013, p. 50).

Outlook

Historically, investors have purchased gold as a safe haven, as a hedge against economic failures, as a portfolio diversifier, and as a store of wealth. However, the economic recovery in the United States in the early part of 2013 prompted fears that the U.S. Federal Reserve would change its monetary policy, coinciding with a decrease in investment in gold in various forms, a decline in gold prices, and limited availability of venture capital for gold exploration. With lower gold prices, global gold consumption is expected to increase because jewelry will become more affordable. Worldwide gold production is expected to increase in 2013 owing to new mines starting production, ramping up recently started mines, and high cutoff grades at some mines to increase ore grades and reduce operating costs. In 2013, some of the significant production increases are expected to be in Brazil, Canada, China, the Dominican Republic, and Russia. However, some of the increases will likely be offset by high-cost operations shutting down in light of lower gold prices.

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TABLE 1
SALIENT GOLD STATISTICS[1]

		2008	2009	2010	2011	2012
United States:						
Production:						
Mine:						
Quantity	kilograms	233,000	223,000	231,000	234,000	235,000
Value	thousands	$6,550,000	$7,000,000	$9,130,000	$11,800,000	$12,600,000
Gold recovered by cyanidation:						
Extracted in vats, tanks, closed containers[2]	kilograms	W	W	W	W	W
Leached in open heaps or dumps[3]	do.	197,000	185,000	193,000	201,000	217,000
Refinery:						
Concentrates and dore	do.	168,000	170,000	175,000	220,000	222,000
Recycled materials (new and old scrap)	do.	181,000	189,000	198,000	263,000	215,000
Exports, refined	do.	459,000	281,000	295,000	403,000	371,000
Imports for consumption, refined	do.	118,000	127,000	199,000	143,000	108,000
Net deliveries from foreign stocks in Federal Reserve Bank of New York	do.	220,000	--	--	3,670	--
Stocks, December 31:						
Industry[4]	do.	W	9,200	6,810	6,470	4,070
Gold exchange traded funds holdings[5]	do.	1,230,000 r	1,840,000 r	2,210,000 r	2,410,000 r	2,690,000
COMEX inventories	do.	265,000	305,000	361,000	353,000	344,000
U.S. Department of the Treasury	do.	8,140,000	8,140,000	8,140,000	8,140,000	8,140,000
U.S. Gold Futures Trading[6]	do.	119,000,000 r	110,000,000	139,000,000	153,000,000	137,000,000
Consumption:						
American Buffalo gold bullion coin[7]	do.	5,890	6,220	6,500	5,430	2,460
American Eagle gold bullion coin[7]	do.	35,600	44,300	38,000	31,100 r	23,400
Jewelry industry and the arts	do.	175,000 r	173,000	180,000	168,000	147,000
Price, average[8]	dollars per troy ounce	873.50	974.68	1,230.00	1,570.00	1,670.00
Employment, mine and mill only[9]		9,560	9,650	10,300	11,100 r	12,700

See footnotes at end of table.

TABLE 1—Continued
SALIENT GOLD STATISTICS[1]

		2008	2009	2010	2011	2012
World:						
Production, mine	kilograms	2,300,000 r	2,480,000 r	2,580,000 r	2,670,000 r	2,690,000
Official bullion reserves[10]	do.	28,700,000	30,400,000	30,700,000	31,100,000	31,700,000

rRevised. do. Ditto. W Withheld to avoid disclosing company proprietary data. -- Zero.

[1]Data are rounded to no more than three significant digits, except prices.

[2]May include small quantities recovered by gravity methods.

[3]May include tailings, waste-ore dumps, and previously mined ore at some inactive mines.

[4]Unfabricated refined gold held by refiners, fabricators, dealers, and the U.S. Department of Defense.

[5]Data from CPM Group.

[6]COMEX only.

[7]Data from U.S. Mint.

[8]Engelhard quotation.

[9]Data from the Mine Safety and Health Administration.

[10]Held by central banks, governments, and international monetary organizations. Data from the International Monetary Fund.

TABLE 2
MINE PRODUCTION OF GOLD IN THE UNITED STATES, BY STATE[1]

(Kilograms)

State	2011	2012
Alaska	25,800	27,700
Nevada	172,000	175,000
Other States[2]	36,100	31,400
Total	234,000	235,000

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes Arizona, California, Colorado, Montana, New Mexico, South Dakota, Utah, and Washington.

TABLE 3
LEADING GOLD-PRODUCING MINES IN THE UNITED STATES IN 2012, IN ORDER OF OUTPUT[1]

Rank	Mine	County and State[2]	Majority owner[3]	Quantity (kilograms)
1	Nevada Operations[4]	Elko, Eureka, Humboldt and Lander, NV	Newmont Mining Corp.	52,900
2	Cortez[5]	Lander, NV	Barrick Gold Corp.	42,600
3	Goldstrike[6]	Elko and Eureka, NV	do.	36,500
4	Smoky Valley Common Operation	Nye, NV	Kinross Gold Corp. (50%), Barrick Gold Corp. (50%)	11,500
5	Fort Knox[7]	Eastern Interior Region, AK	Kinross Gold Corp.	11,200
6	Pogo	do.	Sumitomo Metal Mining Co. (85%), Sumitomo Corp. (15%)	9,870
7	Cresson	Teller, CO	AngloGold Ashanti Ltd.	7,680
8	Bingham Canyon[8]	Salt Lake, UT	Kennecott Utah Copper Corp.[9]	6,220
9	Turquoise Ridge	Humboldt, NV	Barrick Gold Corp. (75%), Newmont Mining Corp (25%)	5,970
10	Bald Mountain	White Pine, NV	Barrick Gold Corp.	5,010

See footnotes at end of table.

TABLE 3—Continued
LEADING GOLD-PRODUCING MINES IN THE UNITED STATES IN 2012, IN ORDER OF OUTPUT[1]

Rank	Mine	County and State[2]	Majority owner[3]	Quantity (kilograms)
11	Kettle River-Buckhorn[7]	Okanogan, WA	Kinross Gold Corp.	4,860
12	Marigold	Humboldt, NV	Goldcorp Inc. (66.7%), Barrick Gold Corp. (33.3%)	4,510
13	Mesquite	Imperial, CA	New Gold Inc.	4,420
14	Hycroft	Humboldt and Pershing, NV	Allied Nevada Gold Corp.	4,260
15	Jerritt Canyon	Elko, NV	Veris Gold Corp.[10]	3,290
16	Golden Sunlight	Jefferson, MT	Barrick Gold Corp.	3,050
17	Hollister	Elko, NV	Great Basin Gold Ltd.	2,690
18	Kensington	Southeastern Region, AK	Coeur d'Alene Mines Corp.	2,550
19	Wharf	Lawrence, SD	Goldcorp Inc.	2,120
20	Greens Creek	Southeastern Region, AK	Hecla Mining Co.	1,730
21	Ruby Hill	Eureka, NV	Barrick Gold Corp.	1,280
22	Rochester	Pershing, NV	Coeur d'Alene Mines Corp.	1,180
23	Robinson[11]	White Pine, NV	KGHM International Ltd.[12]	1,180
24	Briggs	Inyo, CA	Atna Resources Ltd.	1,110
25	Mineral Ridge	Esmeralda, NV	Scorpio Gold Corp.	991
26	Drumlummon	Lewis and Clark, MT	U.S. Silver and Gold Inc.	624
27	Stillwater[13]	Stillwater, MT	Stillwater Mining Co.	280
28	Nixon Fork	Western Region, AK	Fire River Gold Corp.	274
(14)	Borealis	Mineral, NV	Gryphon Gold Corp.	NA
(14)	Denton-Rawhide	do.	Rawhide Mining LLC	NA
(14)	Florida Canyon	Pershing, NV	Jipangu Inc.	NA

do. Ditto. NA Not available.

[1]Data are rounded to no more than three significant digits; the mines on this list accounted for more than 99% of U.S. mine production in 2012.

[2]For Alaska, mines are located by geographic region, as delinerated by the Alaska Division of Geological & Geophysical Surveys in its Special Report 67, Alaska's mineral industry 2011—Exploration activity.

[3]When multiple owners are listed, the operating owner is listed first, and when only one owner is listed the company has full ownership.

[4]Includes nine open pit operations (Emigrant, Genesis, Gold Quarry, Lantern, Pay Raise, Phoenix, Twin Creeks, and Widge Mines) and seven underground operations (Carlin East, Chukar, Exodus, Leeville, Midas, and Pete Bajo Mines).

[5]Includes Cortez Hills and Cortez Pipeline Mines.

[6]Includes Betze-Post, Meikle, and Storm Mines.

[7]Quantity represents total gold equivalent.

[8]Quantity represents total quantity of gold produced in concentrates.

[9]Wholly owned subsidiary of Rio Tinto plc.

[10]Yukon-Nevada Gold Corp. changed its name to Veris Gold Corp. on October 10, 2012.

[11]Quantity represents total quantity of gold, platinum, and palladium produced in concentrate.

[12]Formerly owned by Quadra FNX Mining Ltd., which was purchased by KGHM Polska Miedź SA. on March 5, 2012, and renamed KGHM International Ltd.

[13]Includes East Boulder Mine.

[14]The rank order is not shown to avoid disclosing company proprietary data.

Sources: Company annual reports, company 10–K reports submitted to the U.S. Securities and Exchange Commission, company news releases, and Nevada Bureau of Mines and Geology.

TABLE 4

U.S. EXPORTS OF GOLD, BY COUNTRY[1, 2]

(Kilograms, gold content unless otherwise specified)

Year and country	Ores and concentrates[3]		Dore and precipitates		Refined bullion[4]		Total	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2011	8,400	$282,000	62,800	$2,430,000	403,000	$19,600,000	474,000	$22,300,000
2012:								
Albania	--	--	38	1,590	--	--	38	1,590
Australia	--	--	--	--	5,140	145,000	5,140	145,000
Austria	4	40	--	--	100	5,650	104	5,690
Belgium	12	548	--	--	2	87	14	635
Canada	176	3,320	17,100	220,000	1,150	65,200	18,400	288,000
China	1,190	72,600	--	--	8	442	1,200	73,000
Colombia	--	--	2	116	--	--	2	116
Czech Republic	--	--	25	799	--	--	25	799
Dominican Republic	697	26,200	--	--	--	--	697	26,200
Germany	2,070	67,100	--	--	161	8,490	2,230	75,600
Guatemala	--	--	12	484	9	470	20	954
Honduras	--	--	--	--	15	760	15	760
Hong Kong	1,650	10,500	1,000	51,000	131,000	7,090,000	133,000	7,150,000
India	--	--	38,000	1,660,000	28,900	1,240,000	66,900	2,900,000
Indonesia	--	--	3	121	3	157	6	278
Ireland	6	170	--	--	1	24	6	194
Israel	(5)	14	11	446	--	--	11	460
Japan	20	195	--	--	12	505	32	700
Kazakhstan	--	--	19	584	--	--	19	584
Laos	--	--	--	--	21	1,010	21	1,010
Malaysia	--	--	--	--	326	17,000	326	17,000
Mexico	6,010	71,200	--	--	1,030	52,500	7,040	124,000
New Zealand	--	--	(5)	9	4	213	4	221
Oman	--	--	--	--	280	13,900	280	13,900
Pakistan	--	--	13	498	174	8,060	187	8,560
Peru	--	--	--	--	19	976	19	976
Poland	--	--	--	--	439	24,200	439	24,200
South Africa	--	--	--	--	9,260	504,000	8,260	504,000
Swaziland	--	--	--	--	3	199	3	199
Switzerland	7	228	235,000	10,900,000	44,600	2,270,000	280,000	13,200,000
Taiwan	--	--	--	--	389	19,500	389	19,500
Thailand	1	3	(5)	3	9,280	492,000	9,280	492,000
Turkey	--	--	--	--	35	1,520	35	1,520
United Arab Emirates	--	--	19,300	792,000	1,890	64,200	21,200	856,000
United Kingdom	3	22	27	699	137,000	7,330,000	137,000	7,330,000
Vietnam	--	--	--	--	19	740	19	740
Other	--	--	--	18	1	89	1	107
Total	11,800	252,000	311,000	13,700,000	371,000	19,300,000	692,000	33,300,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Ash and residues data were zero for listed years.

[3]Includes base-metal ores, concentrates, and matte destined for refining.

[4]Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold is excluded.

[5]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 5
U.S. EXPORTS OF GOLD, BY COUNTRY[1]

(Kilograms, gross weight unless otherwise specified)

	Waste and scrap		Metal powder		Gold compounds	
Year and country	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2011	626,000	$7,510,000	670	$19,100	3,930,000	$98,700
2012:						
Argentina	--	--	--	--	170	3
Australia	--	--	1	9	916	17
Belgium	337	2,260	--	--	--	--
Canada	48,300	1,260,000	30	483	591,000	10,600
China	(2)	14	9	267	268,000	13,500
Costa Rica	--	--	11	122	41,600	2,890
Denmark	--	--	--	--	203	4
Dominican Republic	--	--	2	8	192,000	3,450
Ecuador	--	--	--	--	260	17
France	--	--	16	452	2,620	47
Germany	181,000	59,500	8	141	7,270	131
Honduras	--	--	15	217	--	--
Hong Kong	1	112	27	967	2,610	54
India	4	209	18	732	8,960	161
Ireland	--	--	1	17	15,900	494
Italy	6,530	16,700	--	--	919	18
Japan	172	8,160	14	208	2,320	57
Korea, Republic of	--	--	--	--	72,200	1,750
Malaysia	--	--	--	--	251,000	15,600
Mexico	--	--	28	732	637,000	11,500
Netherlands	--	--	--	--	103,000	1,860
Panama	--	--	--	--	150	3
Saudi Arabia	--	--	--	--	831	15
Singapore	--	--	9	81	445,000	41,100
Sweden	--	--	--	--	167	3
Switzerland	16,000	823,000	(2)	7	64,900	2,160
Taiwan	--	--	10	244	76,700	1,380
Thailand	--	--	--	--	4,000	72
Turkey	4	128	--	--	3,290	59
United Kingdom	13,700	136,000	85	3,440	24,900	449
Vietnam	--	--	15	503	439	8
Other	--	3	5	75	--	--
Total	266,000	2,310,000	304	8,710	2,820,000	107,000

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 6

U.S. IMPORTS FOR CONSUMPTION OF GOLD, BY COUNTRY[1]

(Kilograms, gold content unless otherwise specified)

Year and country	Ores and concentrates[2]		Dore and precipitates		Refined bullion[3]		Total	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2011	203,000	$115,000	161,000	$6,910,000	143,000	$6,010,000	507,000	$13,000,000
2012:								
Argentina	--	--	6	280	46	2,840	51	3,120
Australia	3	88	--	--	2,630	118,000	2,630	118,000
Bahamas, The	--	--	10	372	(4)	4	10	376
Barbados	--	--	101	2,850	42	829	143	3,680
Belgium	--	--	--	--	16	653	16	653
Bolivia	--	--	11,900	638,000	707	28,900	12,600	666,000
Brazil	--	--	--	--	1,580	79,400	1,580	79,400
Canada	113	5,700	1,480	74,500	46,200	2,470,000	47,800	2,550,000
Chile	--	--	2,530	148,000	3,600	164,000	6,130	312,000
China	--	--	--	--	7	252	7	252
Colombia	--	--	52,600	2,450,000	8,610	425,000	61,200	2,870,000
Costa Rica	--	--	3	154	112	3,250	115	3,400
Curacao	--	--	8,150	436,000	20	1,050	8,170	437,000
Dominican Republic	52	3,010	226	7,780	288	14,100	566	24,900
Ecuador	--	--	6,480	291,000	223	11,200	6,710	302,000
El Salvador	--	--	56	1,770	--	--	56	1,770
France	--	--	--	--	314	16,700	314	16,700
Germany	--	--	56	3,090	131	7,160	188	10,200
Ghana	--	--	18	964	19	993	37	1,960
Guatemala	--	--	8,040	576,000	1	51	8,040	576,000
Guinea	--	--	1	44	19	918	21	962
Guyana	--	--	7,310	393,000	25	1,420	7,340	395,000
Honduras	--	--	467	22,800	1,690	85,100	2,160	108,000
Hong Kong	--	--	11	619	32	1,680	43	2,300
Jamaica	--	--	70	3,130	1	89	71	3,220
Japan	--	--	5	265	38	1,910	44	2,170
Mexico	563	30,300	87,200	4,070,000	36,500	1,320,000	124,000	5,420,000
Netherlands	--	--	58	2,910	--	--	58	2,910
New Zealand	--	--	31	1,430	6	177	37	1,610
Nicaragua	--	--	2,430	133,000	51	2,390	2,490	136,000
Panama	--	--	168	8,210	591	28,800	758	37,000
Paraguay	--	--	151	8,120	1,510	79,800	1,670	87,900
Peru	4,630	6,660	24,900	1,350,000	456	24,300	29,900	1,380,000
Philippines	--	--	9	351	--	--	9	351
Sierra Leone	--	--	2	83	3	126	5	210
South Africa	--	--	--	--	138	7,580	138	7,580
Spain	--	--	--	--	4	111	4	111
Saint Lucia	--	--	27	1,300	--	--	27	1,300
Saint Vincent and the Grenadines	--	--	17	894	--	--	17	894
Sweden	--	--	--	--	12	476	12	476
Switzerland	--	--	1,490	85,600	1,890	101,000	3,380	187,000
Tanzania	--	--	218	6,490	504	13,200	722	19,700
Trinidad and Tobago	--	--	41	1,280	1	43	42	1,320
Turkey	--	--	6	266	14	714	19	980
United Arab Emirates	--	--	--	--	13	690	13	690
United Kingdom	--	--	--	--	307	17,100	307	17,100
Venezuela	--	--	1,750	83,600	--	--	1,750	83,600
Zaire	--	--	19	600	--	--	19	600
Other	--	--	7	302	15	432	22	734
Total	5,370	45,700	218,000	10,800,000	108,000	5,030,000	332,000	15,900,000

See footnotes at end of table.

TABLE 6—Continued

U.S. IMPORTS FOR CONSUMPTION OF GOLD, BY COUNTRY[1]

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes base metal ores, concentrates, and matte destined for refining.

[3]Bullion also moves in both directions between U.S. markets and foreign stocks on deposit in the Federal Reserve Bank. Monetary gold is excluded.

[4]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 7

U.S. IMPORTS FOR CONSUMPTION OF GOLD, BY COUNTRY[1]

(Kilograms, gross weight unless otherwise specified)

Year and country	Waste and scrap		Metal powder		Gold compounds	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
2011	57,400	$849,000	437	$7,570	37,600	$1,630
2012:						
Antigua and Barbuda	32	984	--	--	--	--
Aruba	241	7,690	--	--	--	--
Australia	6	314	1	8	--	--
Bahamas, The	288	7,600	--	--	--	--
Barbados	114	2,420	--	--	--	--
Belize	36	787	--	--	--	--
Bermuda	256	5,220	--	--	--	--
Bolivia	12,100	425,000	--	--	--	--
Canada	29,500	251,000	9	63	--	--
Chile	103	8,400	--	--	--	--
China	116	724	--	--	--	--
Colombia	2,350	2,180	10	479	--	--
Costa Rica	24,700	39,500	--	--	--	--
Curacao	172	5,410	--	--	--	--
Dominican Republic	9,510	221,000	2	20	--	--
Ecuador	349	10,800	--	--	--	--
El Salvador	2,640	58,000	--	--	--	--
Fiji	234	2,450	--	--	--	--
French Polynesia	156	3,590	(2)	2	--	--
Germany	62	2,310	114	4,620	107	416
Guadeloupe	243	9,050	--	--	--	--
Guatemala	2,320	26,600	--	--	--	--
Guinea	--	--	108	1,940	--	--
Honduras	3,590	94,900	(2)	8	--	--
Hong Kong	21	1,040	--	--	--	--
Israel	132	6,750	--	--	--	--
Italy	30	578	1	14	--	--
Jamaica	1,070	26,300	--	--	--	--
Japan	--	--	2	27	13,200	2,790
Korea, Republic of	620	14,200	(2)	6	--	--
Mali	--	--	5	135	--	--
Martinique	144	5,270	--	--	--	--
Mexico	12,800	67,800	20	61	--	--
Netherlands	546	19,700	--	--	35	168
Nicaragua	1,310	36,000	2	77	--	--
Panama	4,450	23,100	--	--	--	--
Philippines	491	13,100	--	--	--	--
Sierra Leone	2	61	20	344	--	--
Sint Maarten	133	3,430	--	--	--	--
South Africa	83	1,030	--	--	--	--
Switzerland	20	665	12	423	--	--
United Kingdom	4,820	154,000	3	87	31	42
Other	453	11,000	9	178	3	18
Total	116,000	1,570,000	318	8,500	13,400	3,440

-- Zero.

[1]Data are rounded to no more than three significant digits; may not add to totals shown.

[2]Less than ½ unit.

Source: U.S. Census Bureau.

TABLE 8

GOLD: WORLD MINE PRODUCTION, BY COUNTRY[1, 2]

(Kilograms)

Country[3]	2008	2009	2010	2011	2012
Algeria	656	1,010	723	341	300 e
Argentina	42,046	46,588	63,138	59,140 r	56,100 e
Armenia	1,359	944	974 r	1,266 r	1,300 e
Australia	215,000	224,000	261,000	260,000 r	250,000 e
Azerbaijan	--	353	1,900	1,775	1,563
Belize[e]	5	5	--	--	--
Benin[e]	20	20	20	20	20
Bolivia	8,406	7,217	6,394	6,513	6,973
Botswana[e]	3,300	2,000	1,774 [4]	1,800	1,800
Brazil[5]	54,666	60,330	62,047	65,209 r	65,000 e
Bulgaria[e]	4,160 [4]	4,482 [4]	4,000 r	4,600 r	5,000
Burkina Faso	6,033	11,581	22,939	31,774	27,850
Burundi[e]	500 r	500 r	300 r	300 r	300
Cameroon[e]	1,500	1,600	1,600	1,600	1,800
Canada	94,909 r	96,573 r	102,147 r	101,975 r	103,713 p
Central African Republic[e]	43	61	59 r	53 r	55
Chile	39,162	40,834	39,494	45,137 r	49,936
China[e]	285,000	320,000	345,000	362,000	403,000
Colombia	34,321	47,837	53,605	55,908	66,178
Congo (Brazzaville)[e]	100	100	150	150	150
Congo (Kinshasa)[e]	3,300	3,500	3,500	3,500	3,500
Costa Rica	198 r	150 r	300 r	500 r	400 e
Côte d'Ivoire (Ivory Coast)	4,205	6,947	5,310	9,871	10,400
Denmark[6]	1,665	1,117	--	153 e	100 e
Dominican Republic	47	375	494 r	490 r	3,917
Ecuador[7]	4,133 r	5,392 r	4,593 r	4,149 r	3,400 e
Egypt	--	95	9,847 r	7,000 r	8,500
Eritrea[e]	30	30	500	12,000	10,000
Ethiopia[8]	3,465	6,251	5,936	10,000 r, e	12,000 e
Fiji	871	1,040	1,856	1,661 r	1,636
Finland	4,148 r	5,749 r	7,628 r	8,461 r	10,814
France[e]	1,500	1,500	1,500	1,500	--
French Guiana[e]	2,000	2,000	1,140 r	1,300 r	1,300
Gabon	-- r	-- r	-- r	-- r	666
Georgia[e]	2,000	2,000	2,000	2,000 r	1,900
Ghana	73,819 r, 9	67,818 r, 9	72,441 r, 10	82,919 r, 11	86,540
Greece	400	500	500	600 e	800 e
Guatemala	7,837	8,897	9,213	11,898 r	6,473
Guinea	19,945	18,091	13,206 r	15,695	14,479
Guyana	8,131	9,326 r	9,594	11,293 r	13,643
Honduras	2,561	2,127	2,197 r	1,893 r	1,858
India[e, 12]	2,700 [4]	2,800 [4]	2,700	2,300 r	1,800
Indonesia[13]	64,390	140,488	106,316	96,100 e	58,800 e
Iran[e, 14]	1,000 r	2,000 r	2,000 r	2,000 r	2,000
Italy[e]	450	450	450	450	--
Japan	6,868	7,708	8,544	8,691	7,233
Kazakhstan	20,825	22,839	30,272 r	36,846 r	40,006
Kenya	340	1,055	2,355 r	1,636 r	1,600 e
Kyrgyzstan	18,132	16,950	18,300	18,648 r	10,333
Laos	4,333	5,033	5,061	3,984 r	4,000 e
Liberia	624	524	666	448 r	641

See footnotes at end of table.

TABLE 8—Continued
GOLD: WORLD MINE PRODUCTION, BY COUNTRY[1, 2]

(Kilograms)

Country[3]	2008	2009	2010	2011	2012
Madagascar[e, 15]	50 [4]	30 [r]	30 [r]	40 [r]	400
Malaysia	2,489	2,794	3,766	4,219 [r]	4,624
Mali	41,160	42,364	36,360	35,728	40,000 [e]
Mauritania	6,254	8,000	8,325	8,200 [e]	7,931
Mexico	50,365	51,393	72,596	84,118	96,650
Mongolia	15,184	9,803	6,037	5,703	5,995
Morocco[e]	1,200	1,200	1,200	1,200	1,200
Mozambique	298	511	106	111 [r]	110 [e]
Myanmar (Burma)[e]	100	100	100	100	100
Namibia	2,126	2,022	2,675	2,053	2,302
New Zealand	13,402	13,442	13,494	14,324	10,164
Nicaragua	2,965 [r]	2,590	4,900 [r]	6,395 [r]	6,980
Niger	2,314	1,985	1,596	1,453	1,600 [e]
Nigeria[e]	100 [r]	50 [r]	100 [r]	100 [r]	100
North Korea[e]	2,000	2,000	2,000	2,000	2,000
Oman	46	28	12	10 [e]	--
Panama	--	800	870 [r]	1,675 [r]	2,115
Papua New Guinea	67,463	63,600 [r]	62,900 [r]	61,760 [r]	53,100
Peru[16]	179,870	183,995 [r]	164,084	166,187 [r]	161,325
Philippines	35,726	37,047	40,847	31,120 [r]	15,762
Poland[e]	500	500	500	500	500
Romania[e]	400	400	400	400	400
Russia[17]	172,031	192,832	189,000	199,642	217,800
Rwanda[15]	40	30	3	3 [r, e]	3 [e]
Saudi Arabia	4,527	4,857	4,476	4,611 [r]	4,285
Senegal	600 [e]	5,055	4,381	4,089	6,666
Serbia	712	452	356	1,032 [r]	900
Sierra Leone	196	157	270	164	135
Slovakia	92	346	340	300 [e]	300 [e]
Solomon Islands	--	--	--	1,700 [e]	1,800 [e]
South Africa	212,571	197,628	188,702 [r]	180,184 [r]	160,000 [e]
South Korea	175	274	235 [r]	209 [r]	200 [e]
Spain[e]	3,400 [4]	3,450 [4]	3,500	3,550	3,600
Sudan[15]	7,508	14,914	26,317	23,379	46,133
Suriname	9,798	12,193 [r]	10,886 [r]	11,975 [r]	11,882
Sweden	4,953 [r]	5,542 [r]	6,285 [r]	5,994 [r]	6,000 [e]
Tajikistan	1,672	1,361	2,049	2,240	2,401
Tanzania	36,434	39,112	39,448	44,000 [e]	44,000 [e]
Thailand	2,721	5,400	4,215	2,372 [r]	3,000 [e]
Togo[18]	11,835	12,955	10,452	16,469	16,500 [e]
Turkey	11,016 [r]	14,469 [r]	16,890 [r]	24,400 [r]	29,370
Uganda[e]	1,500	1,600	1,600	1,500	1,600
United Kingdom	164	185	171	202	102
United States	233,000	223,000	231,000	234,000	235,000
Uruguay	2,182	1,690	1,740 [r]	1,736 [r]	1,725
Uzbekistan[e]	85,000	90,000	90,000	91,000	93,000
Venezuela[e]	10,100	11,880 [r, 4]	12,000	12,000	12,000
Vietnam[e]	3,000	3,000	3,500	3,500	3,500
Zambia[e]	1,930 [4]	3,100 [4]	3,400	3,500	3,600
Zimbabwe	3,579	4,965	9,100	12,824	14,742
Total	2,300,000 [r]	2,480,000 [r]	2,580,000 [r]	2,670,000 [r]	2,690,000

See footnotes at end of table.

TABLE 8—Continued

GOLD: WORLD MINE PRODUCTION, BY COUNTRY[1, 2]

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[e]Estimated. [p]Preliminary. [r]Revised. -- Zero.

[1]World total, U.S. data, and estimated data are rounded to no more than three significant digits; may not add to totals shown.

[2]Includes data available through September 16, 2014.

[3]Chad and Equatorial Guienea may produce gold, but available information is inadequate to estimate output levels.

[4]Reported figure.

[5]Officially reported figures are as follows, in kilograms: Major companies: 2008—46,066; 2009—52,207; 2010—55,292; 2011—56,969 (revised); and 2012—57,000 (estimated). Garimpieros: 2008—8,600; 2009—8,123; 2010—6,455; 2011—8,240 (revised); and 2012—8,000 (estimated).

[6]All production is from Greenland.

[7]Includes undocumented artisanal production.

[8]Year ending July 7 of that stated.

[9]Excludes artisanal and small-scale mining output.

[10]Excludes artisanal and small-scale mining output, which in 2010 was estimated to be more than 25,000 kilograms.

[11]Excludes artisanal and small-scale mining output, which in 2011 was estimated to be more than 30,000 kilograms.

[12]Refinery output.

[13]Excludes production from so-called people's mines, which may be as much as 20,000 kilograms per year, but includes gold recovered as byproduct of copper mining.

[14]Includes gold recovered from the Mouteh gold mine and from the Sarcheshmeh copper complex.

[15]Reported exports.

[16]Includes documented production from placer artisanal production.

[17]Mine output including gold recovered as a byproduct, but excludes secondary gold production, which for Russia, in kilograms, was 2008—8,140; 2009—12,404 (revised); 2010—12,600 (revised); 2011—9,334; and 2012—8,500.

[18]Includes domestic and imported undocumented artisanal production.